

**A new Nesosydne from *Chenopodium* on Hawaii
(Hemiptera-Homoptera: Delphacidae)**

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In 1948 ("Insects of Hawaii," 4:137) a list of the 72 plants from which native Hawaiian Delphacidae had been collected was given, and it was stated that "It is probable that a careful search of other genera of endemic plants will reveal the presence of many new kinds of leafhoppers". We are now able to add another genus of plants to that list. Dr. O. H. Swezey has asked me to place on record a new species of the endemic genus *Nesosydne* which he reared from *Chenopodium oahuense*, and I am pleased to present the data herewith.

It is interesting that not one of the nearly 300 kinds of endemic leafhoppers listed in my "Insects of Hawaii" has ever been taken on this widespread Hawaiian plant. In fact, the name *Chenopodium* does not occur in my volume on the auchenorrhynchous Homoptera.

This is the eighty-third species of this taxonomically difficult assemblage of native leafhoppers to be described, yet one wonders if half of the species have been discovered.

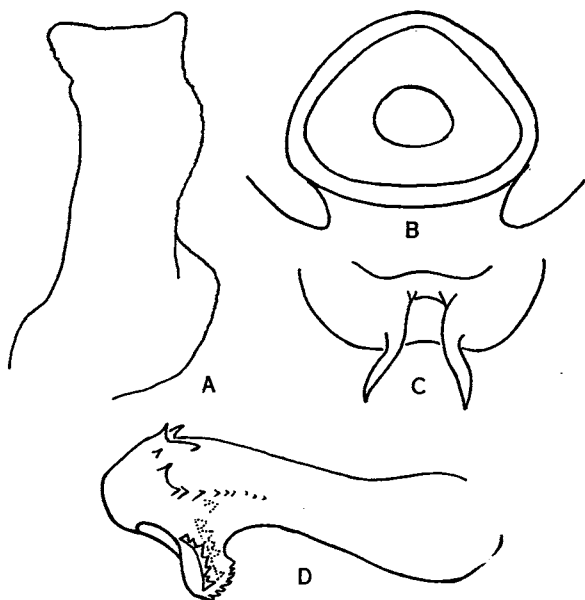
***Nesosydne chenopodii*, new species (figs. A-D) .**

Male. Brachypterous. Length from front of head to apex of tegmina: 2.0-2.1 mm. Color: evidently mostly green or greenish in life, mostly yellowish to greenish yellow after drying; nota of thorax either obscurely clouded and not prominently marked, or with dark areas, especially on metanotum; vertex usually with a fuscous spot on either side of base and a small, dark, median dot at the forking of the carinae which may lengthen forward into a fuscous streak to frons; frons almost concolorous, or with vague pale fuscous clouding between carinae, or with rather strong fuscous between carinae; clypeus with a pair of fuscous maculae at basal suture which may coalesce to form a dark transverse line demarking junction between clypeus and frons; legs with some vague pale fuscous clouding, but hind femora with a rather well-marked longitudinal fuscous stripe on outer sides, apical margins of hind femora and extreme base of hind tibia dark-spotted, major spines along apices of tibiae and tarsal segments and along calcar black-tipped, tarsal claws and apex of terminal tarsal segment black; tegmina hyaline, veins pale, granules on veins either all pale and obscure or some dark, the setae either all pale or some dark, a vague to well-defined dark macula may occur at apex of clavus and near point where first vein reaches apical part of costa (both of these maculae may be absent, or only the claval spot may be evident).

Head: vertex about three-fourths as broad across basal carina as median length, anterior profile moderately convex but carinae not protuberant, a line extended along basal carina passes just behind middles of eyes; frons three times as long as breadth at apex as measured between apices of facial carinae, top of frons, as seen from front, gently convex, median carina low, evidently forking above level of lower edges of eyes, forks not prominent and place of forking obscure; head viewed from side with distance between fore edge of an eye and lateral carina of frons subequal to distance between lateral carina and most remote point on profile of angle where frons rounds into vertex; antennae with first segment slightly less than one-half as long as second (measurements in one example: first segment 5.5 units long along top edge, 4 wide at apex; second

segment 12 long), combined length of first and second segments equal to distance from top edge of antennal scrobe to basal corner of clypeus.

Tegmina extending somewhat beyond apex of abdomen, nearly glass-clear to slightly milky-tinged.



Details of male genitalia of *Nesosydne chenopodii*, new species. A, left style; B, dorso-caudal view of anal segment to show protuberant anal angles of pygophore embracing anal segment; C, caudal view of lower margin of anal segment to show anal spines; D, aedeagus. A, C, D drawn from balsam mount; setae omitted.

Legs: hind femora hardly reaching apex of abdomen, length along dorsal edge subequal to length of a tarsus; hind tibia more than one-fifth longer than a hind tarsus (measured from extreme base to apex of apical spines of tibia); extreme length of first hind tarsal segment to apex of its apical spines fully one-fifth longer than extreme length of segments two plus three.

Pygophore comparatively small, compacted, height from bases of styles to dorsum slightly greater than extreme breadth, no protuberances on lateral or ventral edges; anal angles protuberant, rounded and curled inward to embrace anal segment so that a line drawn between apices of anal angles passes along or behind posterior margin of anal segment (as illustrated); spines of anal segment long, fang-like, curved conspicuously laterad, as viewed from behind, their bases distinctly separated (see figure); genital styles shaped as illustrated, presenting a rather broad view from behind; aedeagus as illustrated.

Female: brachypterous, quite like the male in general appearance; length from front of head to apex of tegmina: 2.5-2.75 mm.; length of tegmina: 2.0-2.5 mm., reaching to slightly behind apex of abdomen.

Pohakuloa (about 6,500 feet elevation), island of Hawaii.

Holotype male, allotype female (in the collection of the Experiment Station, Hawaiian Sugar Planters' Association), two male paratypes, three female paratypes and eight nymphs reared by Dr. O. H. Swezey

in September, 1951 from *Chenopodium oahuense* collected by C. J. Davis.

In my general key to the species of *Nesosydne* ("Insects of Hawaii" 4:175, 1948), this species will run to couplet 9 (8) which includes *chambersi*, and leads to *viridis* and *phyllostegiae*, but there are many obvious differences between these species, as a glance at the figures of the genitalia alone will show. In my key to the species from the island of Hawaii (same reference, page 198), it runs out at couplet 6 (5) and will not fit either alternate. This species appears to have nothing very distinctive which will make it stand out prominently among the other 82 species of *Nesosydne*; it is a rather commonplace species. The sum of its characters does, however, separate it quite well from any other species in the genus thus far discovered.